Abstract of the Invention

OPTICAL INSPECTION OF A SPECIMEN USING MULTI-CHANNEL RESPONSES FROM THE SPECIMEN

A method and inspection system to inspect a first pattern on a specimen for defects against a second pattern that is intended to be the same where the second pattern has known responses to at least one probe. The inspection is performed by applying at least one probe to a point of the first pattern on the specimen to generate at least two responses from the specimen. Then the first and second responses are detected from the first pattern, and each of those responses is then compared with the corresponding response from the same point of the second pattern to develop first and second response difference signals. Those first and second response difference signals are then processed together to unilaterally determine a first pattern defect list.